Constant Current LED RGB Controller User Manual

(Please read through this manual carefully before use)

1、Brief Introduction

RGB controller is a unique DIY version as well as a powerful combination that can control color changes of LED lights with 4-pin 3-loop cables (common anode), built-in 18 modes with touch functional buttons, provided with IR wireless remote control panel, users can control color changes of LED light by pressing the button on the controller or on the remote control panel, very users friendly.

2、Specifications

Model	350mA	700mA
Input voltage	DC12V-DC48V	DC 12V-DC48V
Output current	350mA/CH*3	700mA/CH*3
Driving LEDs	12V: 1-3pcs 1W LED 24V: 1-6pcs 1W LED 36V: 1-9pcs 1W LED 48V: 1-12pcs 1W LED	12V: 1-3pcs 3W LED 24V: 1-6pcs 3W LED 36V: 1-9pcs 3W LED 48V: 1-12pcs 3W LED
Changing mode	18 modes	18 modes
Scale level	256 steps per RGB	256 steps per RGB
Static dimming	mixing up 4096 colors	mixing up 4096colors
working temperature	-30℃-65℃	-30℃-65℃
Dimension	L142*W73*H30(mm)	L142* 73*H30(mm)
Package Size	L145*W88*H46(mm)	L145*W88*H46(mm)
Weight (G.W)	350g	350g

3、Basic Features

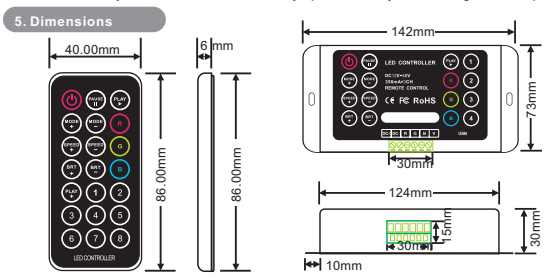
1. Automatically output an accurate voltage as per the LED quantity at each channel from 12V-48V.

2. With 21 buttons IR wireless remote control, reliable control distance can reach as far as 10m.
3. Several DIY Storage Buttons, to record your favorite effect.
4. 0-100% dimming and 16 levels of static brightness per RGB; Can mix 4096 colors.
5. 256 Grey steps per RGB, color-smooth effect is gentle and accurate.
6. Can choose changing speed separately and adjust the brightness of each mode.
7. Can stop at current color and color brightness by selecting PAUSE function.
8. Working with our power repeater to connect more LEDs.
9. Power loss memory function.
10. Equipped with extension infrared receiver, more convenient to receive infrared signals.

4、Safety warnings

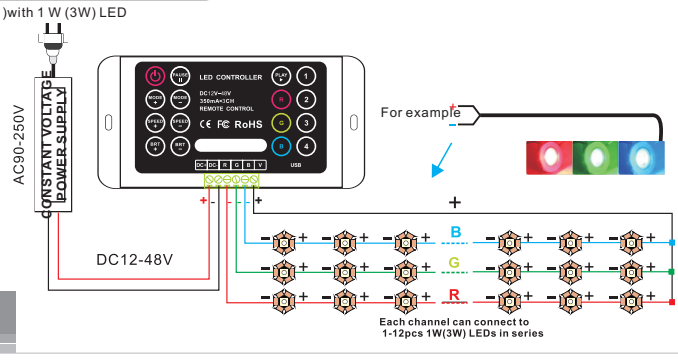
Please don't install this controller in lightening, intense magnetic and high-voltage fields.
1.To reduce the risk of component damage and fire caused by short circuit, make sure correct connection.
2.Always be sure to mount this unit in an area that will allow proper ventilation to ensure a fitting temperature.
3.Check if the voltage and power adapter suit the controller.
(please select DC12-48V power supply with constant voltage)
4.Don't connect cables with power on; make sure a correct connection and no short circuit checked with instrument before power on.
5.Please don't open controller cover and operate if problems occur.
The manual is only suitable for this model; any update is subject to change without prior notice.

5. Dimensions

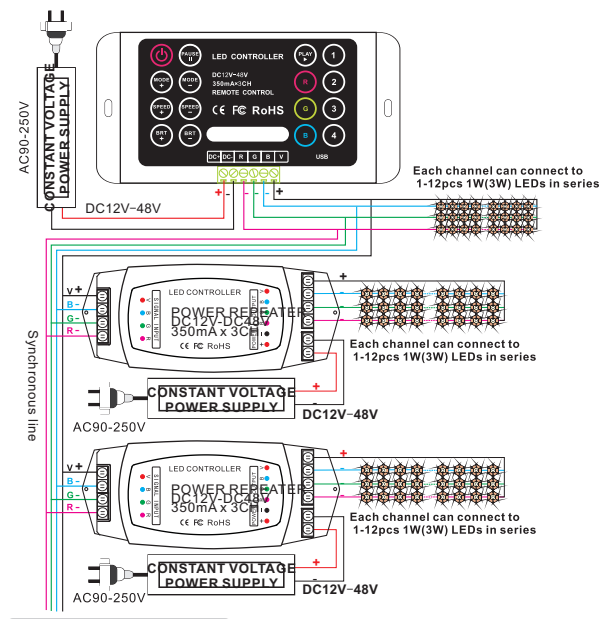


6. Conjunction Diagram

1)with 1 W (3W) LED

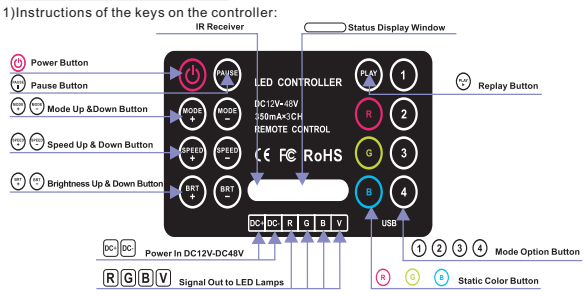


2) Work with power amplifier (the controller and the amplifier can share the same power supply):

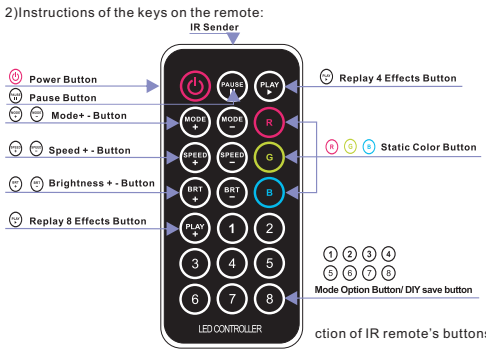


7、Operating instructions

1)Instructions of the keys on the controller:



2)Instructions of the keys on the remote:



ction of IR remote's buttons

3)Detailed key functions

Sign	Button	Description
	ON /OFF	Turn on/off the controller Any button can start the controller at off status.
	PAUSE	Press this button will rest at current color, it will continue to change if press again.Press this button in 3 seconds, the buzzer can be on or off.
	MODE+ MODE-	Press them to select next mode or back to previous mode (pls refer to the VI item) , press MODE+ or press MODE- over 3s to enter cycle mode.
	SPEED+ SPEED-	Press them to quicken or slower speed, press SPEED+ or SPEED- over 3s, current speed is restored to Default status.
	BRT+ BRT-	Press them to increase or decrease brightness, press any one over 3s, current brightness is restored to Default status.
	DIY modes DIY modes of remote	Press them over 3s, LED flickers twice, then remember current change mode on this button, it can save 4 modes, just press it once then enter into pre-setup mode.
	PLAY PLAY+	Press them over 3s, LED flickers twice, then remember the current mode on this button, it can save 8 modes, later can reach your pre-setup mode by just pressing it once.
	RGB Dimming Key	Cycle play the 4 pre-setup modes in controller.
		Cycle play the 8 pre-setup modes in IR remote controller.
		1. Press single R, G, or B key continuously to change the brightness of RGB LED. 2. In single R, G or B dimming status, press BRT+/BRT- key to increase/decrease the brightness of current LED.

Tables of changing modes

Sequence	Modes	Description	Remark
1	Static red	Normally on red	Brightness adjustable
2	Static green	Normally on green	Brightness adjustable
3	Static blue	Normally on blue	Brightness adjustable
4	Static yellow	Normally on yellow	Brightness adjustable
5	Static purple	Normally on purple	Brightness adjustable
6	Static cyan	Normally on cyan	Brightness adjustable
7	Static white	Normally on white	Brightness adjustable
8	3-color skipping	Red, green & blue 3-color skipping	Brightness & speed adjustable
9	7-color skipping	Red, green, blue, yellow, purple, cyan, white 7-color skipping	Brightness & speed adjustable
10	White color strobe	White (with all red, green & blue on) strobe	Brightness & speed adjustable
11	3-color smooth	RGB 3-color gradual changes	Brightness & speed adjustable
12	Full color smooth	All 7-color gradual changes	Brightness & speed adjustable
13	RG color smooth	Red, green 2-color gradual changes	Brightness & speed adjustable
14	RB color smooth	Red, blue 2-color gradual changes	Brightness & speed adjustable
15	GB color smooth	Green, blue 2-color gradual changes	Brightness & speed adjustable
16	White color fade & change	white (with red, green & blue on) gradual bright & fade	Brightness & speed adjustable
17	Great cycle	All changing modes overlap cycle	/
18	RGB static dimming	0-100% dimming per RGB	16 levels of brightness per RGB

7. After Sales

From the day you purchase our products within 3 years, if being used properly in accordance with the instruction, and quality problems occur, we provide free repair or replacement services except the following cases:
1.Any defects caused by wrong operations.
2.Any damages caused by inappropriate power supply or abnormal voltage.
3.Any damages caused by unauthorized removal, maintenance, modifying circuit, incorrect connections and replacing chips.
4.Any damages due to transportation, breaking, flooded water after the purchase.
5.Any damages caused by earthquake, fire, flood, lightning strike etc force majeure of natural disasters.
6.Any damages caused by negligence, inappropriate storing at high temperature and humidity environment or near harmful chemicals.

8. Kindly Reminder

Power Source Selection:
Power source must be DC constant voltage type of power supply. Due to the efficient output in some power supplies are only 80% of total, so please select at least 20% higher output power supply than the consumption of LED lights.